

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LARRY E. HANNEMAN, VAL
KRUKONIS, THOMAS J. TANGNEY
and JAMES J. WATKINS

Appeal No. 95-0593
Application 07/779,230¹

ON BRIEF

MAILED

OCT 26 1995

PAT. & T.M. OFFICE
BOARD OF PATENT APPEALS
AND INTERFERENCES

Before MEROS, LYDDANE and FRANKFORT, Administrative Patent Judges.

MEROS, Administrative Patent Judge.

DECISION ON APPEAL

This appeal is from the examiner's rejection of claims 1-10 and 31-49.

Claims 11-20, the remaining claims, stand withdrawn from consideration pursuant to a restriction requirement.

¹ Application for patent filed October 18, 1991.

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The rejected claims are directed, in general, to (1) an article of manufacture comprising a substrate provided with a layer of a pressure-sensitive adhesive having a total mass loss of less than 1 wt. % and a collected volatile condensable material content of less than 0.1 wt. % under certain specified conditions (claims 1-10), (2) a pressure-sensitive adhesive having a total mass loss of less than 1 wt. % (claims 31-39), and (3) the product produced by treating a cured pressure-sensitive adhesive with a fluid in or at its supercritical state for a time sufficient to dissolve (remove) at least a portion of the volatile fraction of the cured pressure-sensitive adhesive which is thereafter recovered (claims 40-49).

Claims 1, 31 and 40 are illustrative of the claimed subject matter and read as follows:

1. An article of manufacture comprising a substrate having disposed on at least some of the surface thereof a layer of a pressure sensitive adhesive having a total mass loss of less than 1 percent by weight and a collected volatile condensable material content of less than 0.1 percent by weight, both based on the weight of the pressure sensitive adhesive, when the pressure sensitive adhesive is heated to a temperature of 125°C. at a pressure of less than 5×10^{-5} torr for 24 hours.

31. A pressure sensitive adhesive having a total mass loss of less than 1 percent by weight, based on the weight of the pressure sensitive adhesive, when it is heated to a temperature of 125°C. at a pressure of less than 5×10^{-5} torr for 24 hours.

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40. The product produced by a process comprising

(a) bringing a cured pressure sensitive adhesive having a volatile fraction content into contact with a fluid in or near its supercritical state, in a pressure vessel, for time sufficient to dissolve at least a portion of the volatile fraction in the fluid;

(b) separating the pressure sensitive adhesive and the fluid containing a volatile fraction; and

(c) recovering a pressure sensitive adhesive having a reduced volatile fraction content.

The examiner relies on the following references:

Pennace et al. (Pennace)	4,762,680	Aug. 9, 1988
Tangney	5,082,706	Jan. 21, 1992
		(filed Nov. 23, 1988)
Copley et al. (Copley)	0,255,226	Feb. 3, 1985
(EPA '226)		

All of the claims stand rejected under 35 USC § 103 as being unpatentable over each of Tangney and Pennace and also over each of these references in view of EPA '226.²

After consideration of the complete record before us, including the respective positions of the examiner and the appellants, it is our decision to reverse the examiner's rejections.

² The rejection based on each of Tangney and Pennace in view of EPA '226 is a new rejection introduced in the Examiner's Answer. The remaining rejections in the final rejection have been withdrawn by the examiner (Answer, page 4).

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As to the § 103 rejections based on each of Tangney and Pennace taken alone, the examiner concedes that "Since the references do not suggest removing any volatiles, it is assumed the TML and CVDM values of the articles of the prior art are above the claimed values" (Answer, page 5). Without establishing obviousness of the claimed TML and/or CVDM values (in the sense of § 103), the examiner only states that "[T]here is no evidence of any unexpected properties which would patentably distinguish the respective adhesive tapes" (Answer, page 5). However, as stated by the court in In re Ratti, 270 F.2d 810, 814, 123 USPQ 349, 352, 353:

The statutory requirements for patentability, broadly stated, are novelty, usefulness and unobviousness, as provided in 35 U.S.C. sections 101, 102, and 103. While it is true that proof that an invention is better or does possess advantages may be persuasive of the existence of any one or all of the foregoing three requirements, and hence be indicative of patentability, Congress has not seen fit to make such proof a prerequisite to patentability.

See also, Ex parte Parthasarathy, 174 USPQ 63 (PO Bd. App. 1971); In re Schirmer, 480 F.2d 1342, 178 USPQ 483 (CCPA 1973). Thus, in premising the § 103 rejections based on Tangney and Pennace on a requirement of a showing of "unexpected properties", rather than a finding of obviousness as to the claimed subject matter as a whole, the examiner has committed reversible error. Accordingly, these rejections cannot stand.

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We now turn to the § 103 rejection of the claims based on each of Tangney and Pennace in view of EPA '226, which we also will not sustain.

Obviousness cannot be established by combining teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992); In re Laskowski, 871 F.2d 115, 10 USPQ2d 1397 (Fed. Cir. 1989).

We agree with appellants that the cited references fail to suggest or provide motivation for applying the treatment of silicone resins with a liquid (e.g. carbon dioxide) in its supercritical state in order to fractionate said resins into fractions having a narrow molecular weight range to cured silicone pressure-sensitive adhesives. There is simply nothing in the references which suggests that the purpose of the fractionation process disclosed by EPA '226 for producing narrow molecular weight range fractions from silicon resins is applicable to the cured silicone pressure-sensitive adhesives disclosed by Tangney or Pennace as urged by the examiner, let alone the desirability to do so for the purpose of reducing the volatile content of said cured silicone pressure-sensitive adhesives. It is our view that the examiner has used impermissible hindsight in the light of appellants' disclosure in the attempt to arrive at the claimed invention based on the combined teachings of the cited

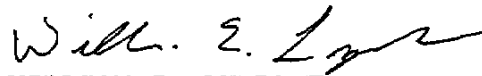
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references: Cf. In re Kamm, 452 F.2d 1052, 172 USPQ 298 (CCPA 1972);
In re Fritch, supra.

The examiner's rejection of claims 1-10 and 31-49 is
reversed.

REVERSED


EDWARD J. MEROS)
Administrative Patent Judge)


WILLIAM E. LYDDANE)
Administrative Patent Judge)


CHARLES E. FRANKFORT)
Administrative Patent Judge)

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